SEQUENCE LISTING

<110> PURINA MILLS, LLC
PURDUE RESEARCH FOUNDATION

<120> PORCINE LEPTIN PROTEIN, ANTISENSE, AND ANTIBODY

<130> LL31.12-0016

<140> U.S. PATENT APPLICATION NO. 09/932,888
<141> 2001-08-20

<150> U.S. Patent Application No. 08/692,922
<151> 1996-07-31

<160> 9

<170> PatentIn version 3.3

<210> 1
<211> 5917
<212> DNA
<213> Sus scrofa

<220>
<221> gene
<222> (1)..(5917)
<223> Nucleotide sequence of the porcine leptin gene. CDS Location: join (942..1085,3400..3753)

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<222> (2943)..(2944)
<223> n is a, c, g, or t

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<222> (3037)..(3037)
<223> n is a, c, g, or t

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gcattatcca atttgatcct cataaaagcc tggagatgtg tatattgtgg tggatggagg 540

gggagtcttt agcagttatg ggatatgcct gaagtcgtgc agctagtaaa tggctggatt 600

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gaagtgtttg ctggaagagc ggagtttcca ggctgatttt gcaggaggtg agggaagtgg 5880

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<210> 2
<211> 501
<212> DNA
<213> Sus scrofa

<220>
<221> misc_feature
<222> (1)..(501)
<223> Nucleotide sequence of the entire coding region of porcine leptin (i.e. signal peptide and secreted protein)

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gccgtgccca tctggagagt ccaggatgac accaaaaccc tcatcaagac gattgtcacc 120

aggatcagtg acatttcaca catgcagtct gtctcctcca aacagagggt caccggtttg 180

gacttcatcc ctgggctcca tcctgtcctg agtttgtcca agatggacca gaccctggcg 240

atctaccaac agatcctcac cagtctgcct tccagaaatg tgatccaaat atcgaatgac 300

ctggagaacc tccgggacct tctccacctg ctggcctcct ccaagagctg ccccttgccc 360

agcagggccc tggagacctt ggagagcctg ggcggcgtcc tggaagcctc cctctactcc 420

acggaggtgg tggccctgag caggctgcag ggggctctgc aggacatgct gcggcagctg 480

gacctcagcc ctggctgctg a 501

<210> 3
<211> 166
<212> PRT
<213> Sus scrofa

<220>
<221> Protein
<222> (1)..(166)
<223> Amino acid translation of the entire coding region of porcine leptin (i.e. signal peptide and secreted protein)

<400> 3

Met Arg Cys Gly Pro Leu Cys Arg Phe Leu Leu Ala Leu Ala Tyr Leu
1 5 10 15

Ser Tyr Val Glu Ala Val Pro Ile Trp Arg Val Gln Asp Asp Thr Lys
20 25 30

Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Ser Asp Ile Ser His Met
35 40 45

Gln Ser Val Ser Ser Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
50 55 60

Gly Leu His Pro Val Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala
65 70 75 80

Ile Tyr Gln Gln Ile Leu Thr Ser Leu Pro Ser Arg Asn Val Ile Gln
85 90 95

Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala
100 105 110

Ser Ser Lys Ser Cys Pro Leu Pro Ser Arg Ala Leu Glu Thr Leu Glu
115 120 125

Ser Leu Gly Gly Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val Val
130 135 140

Ala Leu Ser Arg Leu Gln Gly Ala Leu Gln Asp Met Leu Arg Gln Leu
145 150 155 160

Asp Leu Ser Pro Gly Cys
165

<210> 4
<211> 435
<212> DNA
<213> Sus scrofa

<220>
<221> misc_feature
<222> (1)..(435)
<223> Nucleotide sequence of the coding region of porcine leptin corresponding to the secreted porcine leptin protein

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atcagtgaca tttcacacat gcagtctgtc tcctccaaac agagggtcac cggtttggac 120

ttcatccctg ggctccatcc tgtcctgagt ttgtccaaga tggaccagac cctggcgatc 180

taccaacaga tcctcaccag tctgccttcc agaaatgtga tccaaatatc gaatgacctg 240

gagaacctcc gggaccttct ccacctgctg gcctcctcca agagctgccc cttgcccagc 300

agggccctgg agaccttgga gagcctgggc ggcgtcctgg aagcctccct ctactccacg 360

gaggtggtgg ccctgagcag gctgcagggg gctctgcagg acatgctgcg gcacgtggac 420

ctcagccctg gctgc 435

<210> 5
<211> 145
<212> PRT
<213> Sus scrofa

<220>
<221> Protein
<222> (1)..(145)
<223> Amino acid translation of porcine leptin cDNA corresponding to the secreted porcine leptin protein

<400> 5

Val Pro Ile Trp Arg Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
1 5 10 15

Ile Val Thr Arg Ile Ser Asp Ile Ser His Met Gln Ser Val Ser Ser
20 25 30

Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Val
35 40 45

Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala Ile Tyr Gln Gln Ile
50 55 60

Leu Thr Ser Leu Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu
65 70 75 80

Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala Ser Ser Lys Ser Cys
85 90 95

Pro Leu Pro Ser Arg Ala Leu Glu Thr Leu Glu Ser Leu Gly Gly Val
100 105 110

Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val Val Ala Leu Ser Arg Leu
115 120 125

Gln Gly Ala Leu Gln Asp Met Leu Arg His Val Asp Leu Ser Pro Gly
130 135 140

Cys
145

<210> 6
<211> 504
<212> DNA
<213> Homo sapiens

<220>
<221> DNA
<222> (1)..(504)
<223> Nucleotide sequence of human leptin protein

<400> 6
atgcattggg gaaccctgtg cggattcttg tggctttggc cctatctttt ctatgtccaa 60

gctgtgccca tccaaaaagt ccaagatgac accaaaaccc tcatcaagac aattgtcacc 120

aggatcaatg acatttcaca cacgcagtca gtctcctcca aacagaaagt caccggcttg 180

gacttcattc ctgggctcca ccccatcctg accttatcca agatggacca gacactggca 240

gtctaccaac agatcctcac cagtatgcct tccagaaacg tgatccaaat atccaacgac 300

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ctggacctca gccctgggtg ctga 504

<210> 7
<211> 504
<212> DNA
<213> Artificial

<220>
<223> Murine Leptin

<220>
<221> DNA
<222> (1)..(504)
<223> Nucleotide sequence of murine leptin protein

<400> 7
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gacttcattc ctgggcttca ccccattctg agtttgtcca agatggacca gactctggca 240

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ttggatgtta gccctgaatg ctga 504

<210> 8
<211> 36
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 8
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<210> 9
<211> 30
<212> DNA
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<220>
<223> Primer

<400> 9
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